

Listing of Claims

The following listing of claims replaces any pending claims. Inserted text is shown as underlined ("____") and deleted text is shown as stricken ("—").

1. (Currently Amended) A method of reducing fluorine contamination on a integrated circuit wafer surface comprising:

placing an integrated circuit wafer on a cathode stage wherein said integrated circuit wafer comprises a surface contaminated with fluorine; and

treating ~~bombarding~~ said integrated circuit wafer surface with a plasma to remove said fluorine from said surface wherein said cathode stage is heated to a [[high]] temperature to thereby increase the rate of said fluorine removal.

2. (Original) The method according to claim 1 wherein said surface comprises bonding pads.

3. (Original) The method according to claim 1 wherein said surface comprises an aluminum containing layer.

4. (Original) The method according to claim 1 wherein said heating of said cathode stage comprises a temperature range of between about 50 degrees C and about 500 degrees C.

5. (Original) The method according to claim 1 wherein said step of bombarding comprises N₂ gas.

6. (Original) The method according to claim 1 wherein said step of bombarding comprises argon gas.

7. (Original) The method according to claim 1 wherein said step of bombarding further comprises a reducing gas to form HF from said fluorine contamination wherein said HF is removed by said bombardment gas.

8. (Original) The method according to claim 7 wherein said reducing gas comprises H₂.

9. (Original) A method of reducing fluorine contamination on a integrated circuit wafer surface comprising: placing an integrated circuit wafer on a cathode stage wherein said integrated circuit wafer comprises a surface contaminated with fluorine; and treating said integrated circuit wafer with a plasma wherein said plasma comprises a bombardment gas that removes said fluorine from said surface, wherein said cathode stage is heated to a high temperature to thereby increase the rate of said fluorine removal, and wherein said heating of said cathode stage comprises a temperature range of between 50 degrees C and 500 degrees C.

10. (Original) The method according to claim 9 wherein said surface comprises bonding pads.

11. (Original) The method according to claim 9 wherein said surface comprises an aluminum containing layer.

12. (Original) The method according to claim 9 wherein said bombardment gas comprises N₂.

13. (Original) The method according to claim 9 wherein said bombardment gas comprises argon.

14. (Original) The method according to claim 9 wherein said step of treating further comprises a reducing gas to form HF from said fluorine contamination wherein said HF is removed by said bombardment gas.

15. (Original) The method according to claim 14 wherein said reducing gas comprises H₂.

16. (Original) A method of reducing fluorine contamination on a integrated circuit wafer surface comprising: placing an integrated circuit wafer on a cathode stage wherein said integrated circuit wafer comprises a surface contaminated with fluorine; and treating said integrated circuit wafer with a plasma wherein said plasma comprises a reducing gas that forms HF from said fluorine and a bombardment gas that removes said HF from said surface, wherein said cathode stage is heated to a high temperature to thereby increase the rate of said fluorine removal, and wherein said heating of said cathode stage comprises a temperature range of between 50 degrees C and 500 degrees C.

17. (Original) The method according to claim 16 wherein said surface comprises an aluminum containing layer.

18. (Original) The method according to claim 16 wherein said bombardment gas comprises N₂.

19. (Original) The method according to claim 16 wherein said bombardment gas comprises argon.

20. (Original) The method according to claim 16 wherein said reducing gas comprises H₂.